BELOZOVICH, Ivan Mikhaylovich, kand. tekhn. nauk; EPSHTEYN, Samuil Aronovich, inzh.; KOPELYANSKIY, G.D., kand.tekhn.nauk, retsenzent; PERAKOVA, Ye.P., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.; SABITOV, A., tekhn. red.

[Materials and products for the construction of mines] Materialy i izdeliia dlia stroitel'stva gornykh predpriiatii; spravochnoe posobie. Moskva, Gosgortekhizdat, 1962. 259 p. (MIRA 16:2)
(Building materials) (Mine buildings)

BELOZOVICH, Ivan Mikhaylovich, kand. tekhn.nauk; EPSHTEYN, Samuil Aronovich, inzh.; KOPELYANSKIY, G.D., kand.tekhn.nauk, retsenzent; PETRAKOVA, Ye.P., red.izd-va; PROZOROVSKAYA, V.L., tekhn. red.; SABITOV, A., tekhn. red.

[Materials and products for constructing mining enterprises; a handbook] Materialy i izdeliia dlia stroitel'stva gornykh predpriiatii; spravochnoe posobie. Moskva, Gosgortekhizdat, 1962. 259 p. (MIRA 16:5)
(Mining engineering--Equipment and supplies)

ANASTASIADI, A.P.; BOROVSKIY, V.R.; VYBORNOV, G.V.; KOPELYANSKIY, G.D.; MAK, I.L.; PECHURO, S.S.; PIYEVSKIY, I.M.; RACHEVSKAYA, K.D.; REYZNER, Yu.B.; RYBAK, L.L.; TSEPELIOVICH, M.R.; SHUMAKHER, L.I.; YUSHKEVICH, M.O.[deceased]; AGEYENKO, Yu.G., nauchnyy red.; BELUGIN, A.T., nauchnyy red.; KOGAN, G.S., nauchnyy red.; KRZHEMINSKIY, S.A., nauchnyy red.; MITSKEVICH, M.I., nauchnyy red.; SILENOK, S.G., nauchnyy red.; TRILESNIK, Z.Ye., nauchnyy red.; ZUBAREV, K.A., glav. red.; TROFIMOV, I.P., red.; SKRAMTAYEV, B.G., glav. red.; BALAT'YEV, P.K., red.; KITAYEV, Ye.N., red.; KITAYGORODSKIY, I.I., red.; ROKHVARGER, Ye.L., red.; KHOLIN, I.I., red.; CHERKINSKAYA, R.L., red.; RODIONOVA, V.M., tekhn. red.

[Manual on the production of gypsum and gypsum products] Spravochnik po proizvodstvu gipsa i gipsovykh izdelii. [By] A.P. Anastasiadi i dr. Pod red. K.A.Zubareva. Moskva, Gosstroizdat, 1963. 464 p. (MIRA 16:7)
(Gypsum) (Gypsum products)

MAKAROV, A.Ya.; KOPELYANSKIY, G.D., kand.tekhn. nauk, retsenzent; GORNYKH, V.P., inzh., red.; MATYASH, B.F., inzh., red.; YAKSHAROV, Yu.S., inzh., red.; MIKHAYEV, N.I., red.

[Reference manual on building materials] Spravochnik po stroitel'nym materialam. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1963. 647 p. (MIRA 17:7)

ZHITNYY, P.; DUDAREV, V.; OGARKOV, V.; KOPELYANSKIY, V.; NOVIKOV, K.

Exchange of experience. Avt.transp. 42 no.3:55-56 Mr '64.
(MIRA 17:4)

KOPENDOKH, S., starshiy inzh.podrazdeleniya reaktivnykh samoletov

Potentialities and realities. Grazhd.av. 18 no.4:14-15 '61.
(MIRA 14:4)
(Siberia, Eastern—Aeronautics, Commercial)

KOPENIN, K.N.

Our experience in the maintenance of continuous track. Put' i put. khoz. 6 no.8:25 Ag '61. (MIRA 14:10)

1. Nachal'nik Gatchinskoy distantsii puti Oktyabr'skoy dorogi.
(Railroads--Track)

KOPENKIN, V.D., inzh.

Correlation of some physicomechanical properties of peat with indices of its particle size distribution. Izv. vys. ucheb. zav.; gor. zhur. 6 no.7:40-45 '63. (MIRA 16:9)

1. Kalininskiy torfyanoy institut. Rekomendovana kafedroy osnov tekhnologii promyshlennosti i sel'skokhozyaystvennogo torfodobyvaniya Kalininskim torfyanym institutom.
(Peat) (Particle size determination)

KOVENKIN, V.N.

New data on the dispersity of peat. Koll. zhur. 26 no.4: 465-469 Jl-Ag '64. (MIRA 17:9)

1. Kalininskiy torfyanoy institut.

KOPENKIN, V.D.

Certain regularities in the dispersion composition of processed peat. Trudy Kal. torf. inst. no.13:162-170 '63.

(MIRA 17:12)

KOPENYAK, V.M.

Hydraulic vises for power hack saws. Mashinostoritel' no. 5:23 My '64. (MIRA 17:7)

KOPER, J.

KOPER, J.

Differential linear equations in Banach spaces.

P. 3 (Matematyka, Chemie) Vol. 10, no. 1, 1957, Poznan, Poland.

so; monthly index of east european accessions (eeai) LC. - vol. 7, no. 1, Jan. 1958

KOPER, S.

Some problems connected with the fertility of soils. Postepy nauk roln 7 no.4:83-88 Jl-Ag '60. (EEAI 10:2)
(Soils)

WAZNY, Mieczyslaw; KOPER, Stanislaw; KLAMUT, Marian

The cineradiographic method of studying the time of pulmonary circulation. Acta physiol. Pol. 16 no.2:321-327 Mr-Ap'65.

1. Zaklad Radiologii Akademii Medycznej w Lublinie (Kierownik: prof. dr. K. Skorzynski); Katedra Chirurgii Wydzialu Weterynaryjnego Wyzszej Szkoly Rolniczej w Lublinie (Kierownik: doc. dr. M. Lewandowski).

KOPER, Stanislaw; KARGOL, Zofia

Fertilizing problems in the Warsaw Voivodeship. Postepy nauk roln 10 no. 2: 85-96 Mr-Ap '63.

1. Stacja Chemiczno-Rolnicza, Warszawa.

KOPER, Stanislaw; WOLOSZ, Barbara

Numerical formulation of the interdependence of soil reaction and the easily dissolving P_2O_5 content in soil. Postepy nauk roln 11 no. 1: 113-116 Ja-F '64.

1. Agrochemical Station, Warsaw.

KOPER, Tadeusz

New types of feeding equipment. Przegl techn 85 no. 32s3 9 Ag '64.

KOPERA, K.; WALERIANCZYK, E.; JARZECKI, A.

Preliminary defecation at the Witaszyce Sugar Plant. p. 175

GAZETA CUKROWNICZA (Stowarzyszenie Naukowo-Techniczne Inzynierow i Techników Przemyslu Rolnego i Spozywczego i Centralny Zarzad Przemyslu Cukrowniczego) Warszawa, Poland. Vol. 61, no. 6, June 1959

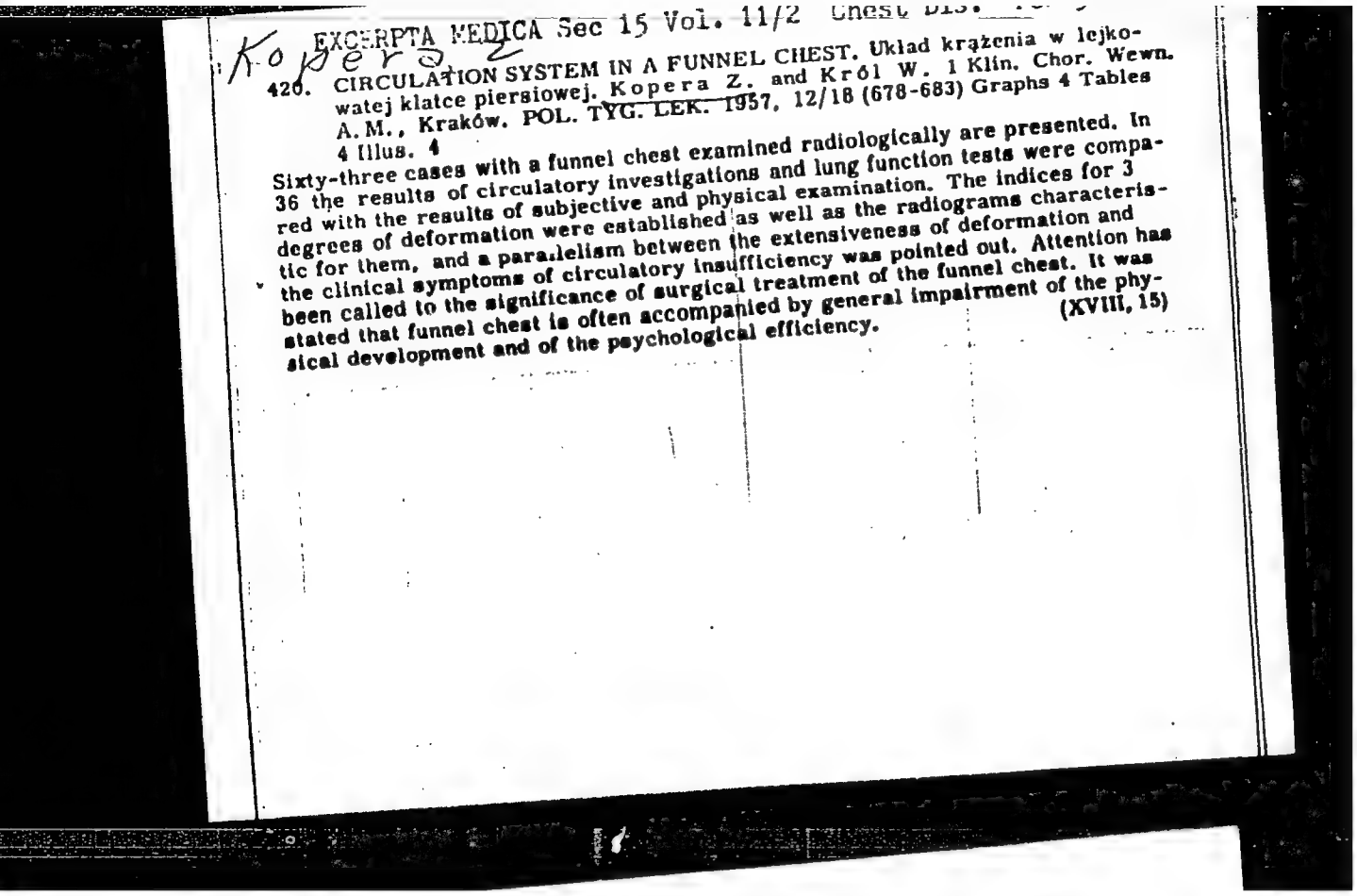
Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, September 1959 Uncl.

SOKOLOWSKI, Adam; KOPERA, Zygmunt

Case of Otto-Chrombac protrusio primaria acetabuli in adolescent. Postepy reumat. no.3:140-145 1957.

1. Z Instytutu Reumatologicznego. Dyrektor: prof. dr B. Reicher. Oddzial Krakow, Dyrektor: prof. dr A. Sabatowski. Kierownik dzialu klinicznego: doc. dr A. Sokolowski.

(PELVIS, abnorm.
Otto-Chrombac pelvis in adolescent (Pol))
(ABNORMALITIES
pelvis)



Kopera 2

EXCERPTA MEDICA Sec 15 Vol. 11/2 Chest Dis.

420. CIRCULATION SYSTEM IN A FUNNEL CHEST. Układ krążenia w lejkowatej klatce piersiowej. Kopera Z. and Król W. 1 Klin. Chor. Wewn. A.M., Kraków. POL. TYG. LEK. 1957, 12/18 (678-683) Graphs 4 Tables 4 Illus. 4

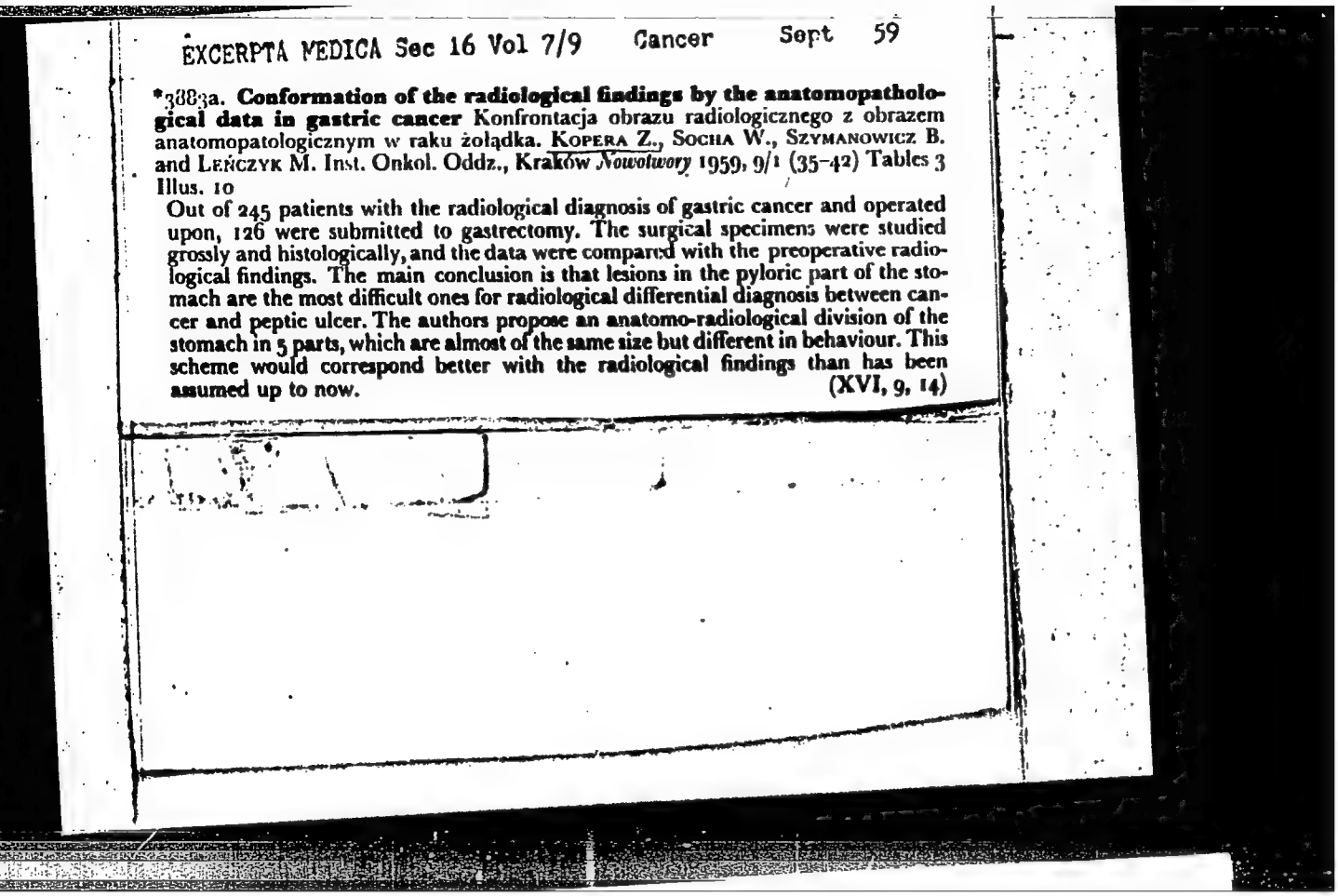
Sixty-three cases with a funnel chest examined radiologically are presented. In 36 the results of circulatory investigations and lung function tests were compared with the results of subjective and physical examination. The indices for 3 degrees of deformation were established as well as the radiograms characteristic for them, and a parallelism between the extensiveness of deformation and the clinical symptoms of circulatory insufficiency was pointed out. Attention has been called to the significance of surgical treatment of the funnel chest. It was stated that funnel chest is often accompanied by general impairment of the physical development and of the psychological efficiency. (XVIII, 15)

KOPERA, Zygmunt; SEDZIWY, Ludwik

Application of penicillin in the treatment of peptic ulcer of the stomach. Polski tygod. lek. 13 no.1:8-12 6 Jan 58.

1. (Z I Kliniki Chorob Wewnetrznych A. M. w Krakowie; kierownik: prof. dr med. Leon Tochowicz). Adres: Krakow, ul. Kopernika 17. I Klinika Chorob Wewnetrznych A. M.

(PEPTIC ULCER, ther.
penicillin, value in differentiation from cancer (Pol))
(PENICILLIN, ther. use
peptic ulcer, value in differentiation from cancer (Pol))
(STOMACH NEOPLASMS, differ. diag.
peptic ulcer, response to penicillin ther. (Pol))



EXCERPTA MEDICA Sec 16 Vol 7/9 Cancer Sept 59

*3883a. **Conformation of the radiological findings by the anatomopathological data in gastric cancer** Konfrontacja obrazu radiologicznego z obrazem anatomopatologicznym w raku żołądka. KOPERA Z., SOCHA W., SZYMANOWICZ B. and LEŃCZYK M. Inst. Onkol. Oddz., Kraków *Nowotwory* 1959, 9/1 (35–42) Tables 3 Illus. 10

Out of 245 patients with the radiological diagnosis of gastric cancer and operated upon, 126 were submitted to gastrectomy. The surgical specimens were studied grossly and histologically, and the data were compared with the preoperative radiological findings. The main conclusion is that lesions in the pyloric part of the stomach are the most difficult ones for radiological differential diagnosis between cancer and peptic ulcer. The authors propose an anatomo-radiological division of the stomach in 5 parts, which are almost of the same size but different in behaviour. This scheme would correspond better with the radiological findings than has been assumed up to now. (XVI, 9, 14)

KOPERA, Zygmunt; LENCZYK, Maria; SYZMANOWICZ, Barbara; SOCHA, Wladyslaw

Value of radiological examination in the evaluation of completeness of total excision of gastric cancer. Polski przegl. chir. 31 no.3: 257-264 Mar 59.

1. Z Instytutu Onkologii w Krakowie Dyrektor: doc. dr H. Kolodziejska. Adres autorow: Krakow, ul. Garncarska 11.

(GASTRECTOMY, in var. dis.
cancer, x-ray evaluation of complete excis. of neoplastic foci (Pol))

KOPERA, Zygmunt; BARNIK-SCHRAMM, Alicja

Dislocation of the atlas during the course of rheumatoid arthritis.
Polski tygod.lek.15 no.9:315-319 29 F '60.

1. Z Instytutu Reumatologicznego; dyrektor: prof.dr.nauk med. E. Reichter, Oddzial w Krakowie: dyrektor: prof.dr.nauk med. A. Sabatowski; Kierownik Dzialu klinicznego: prof.dr.med. A. Sokolowski.
(ARTHRITIS RHEUMATOID comp.)
(ATLAS AND AXIS fract.& disloc.)

OSZACKI, Jan; KOPERA, Zygmunt; KROL, Wladyslaw

Status of the circulatory system before and after a surgical intervention for funnel chest. Polski przegl. chir. 35 no.1: 7-13 '63.

1. Z I Kliniki Chorob Wewnetrznych AM w Krakowie Kierownik: prof. dr L. Tochowicz i z II Kliniki Chirurgicznej AM w Krakowie Kierownik: prof. dr J. Oszacki.

(FUNNEL CHEST) (SURGERY, OPERATIVE)
(ELECTROCARDIOGRAPHY) (BLOOD PRESSURE)
(BALLISTOCARDIOGRAPHY) (RESPIRATION)
(BLOOD CIRCULATION)

KUJAWSKA, Janina; SZYMCZYK, Wieslawa; SKOLYSZEWSKI, Jan; KOPERA, Zygmunt

A technic for rotation roentgentherapy of esophageal cancer in the Krakow Institute of Oncology. Nowotwory 14 no.3:299-303 Ag-S '64

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med. H. Kolodziejska).

KOPERA, Zygmunt

Radiological localization of tumors. Nowotwory 14 no.4:345-348 O-D '64

1. Z Instytutu Onkologii w Krakowie (Dyrektors prof. dr. med. H. Kolodziejska).

KOPERA, Zygmunt; LENCZYK, Maria

Value of radiological control after partial gastrectomy due to cancer. Pol. tyg. lek. 20 no.22:804-805 31 My '65.

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med. Hanna Kolodziejska).

KOPERA, Zygmunt; GUZECKI, Andrzej

Radiological appearances following radiation treatment of giant-cell tumors. Nowotwory 15 no.2:181-185 Ap-Je '65.

1. Z Instytutu Onkologii w Krakowie (Dyrektor: prof. dr. med. H. Kolodziejska).

KOPYRBAKH, B.L.

Gear-cutting machines. Biul.tekh.-ekon.inform. no.10:79-83 '60. (MIRA 13:10)

(Gear-cutting machines)

VINNIK, L.M.; GRINBERG, R.Ya.; KAMINSKIY, Ya.A.; KLEPIKOV, V.D.; KUZNETSOV, A.M.; KUCHENEV, N.I.; STRUZHESTRAKH, Ye.I.; TISHIN, S.D.; KHARITONOV, A.B.; TSEYTS, I.E.; SHAPIRO, I.I.; SHAPIRO, M.Ya.; ANAN'YAN, V.A., retsenzent; VASIL'YEV, D.T., retsenzent; GORETSKAYA, Z.D., retsenzent; KARTSEV, S.P., retsenzent; KEDROV, S.M., retsenzent; KOMISSARZHEVSKAYA, V.N., retsenzent; KOPERBAKH, B.L., retsenzent; KORBOV, M.M., retsenzent; LEONOV, N.I., retsenzent; LUR'YE, G.B., retsenzent; NOVIKOV, V.F., retsenzent; GAL'TSOV, A.D., red.; VOL'SKII, V.S., red.; KHISIN, R.I., red.; SEMENOVA, M.M., red. izd-va; MODEL', B.I., tekhn.red.

[Reference book for establishing norms in the manufacture of machinery; in 4 volumes] Spravochnik normirovshchika-mashinostroitelia; v 4 tomakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol.2. [Establishing technical norms for operating machine tools] Tekhnicheskoe normirovanie stanochnykh rabot. Pod red. E.I.Struzhestrakha. 1961. 392 p. (MIRA 14:8)

(Industrial management) (Machine tools)

KOPERBAKH, B.L.; ROZENBAUM, B.S., red.; CHIGAREVA, E.I., red.; BONDAREV, M.S., tekhn. red.; IL'YUSHENKOVA, T.P., tekhn. red.

[Development of gear-cutting machines abroad; survey] Razvitie konstruktsii zuboobrabatyvaiushchikh stankov za rubezhom; obzor. Moskva, 1961. 137 p. (MIRA 14:11)
(Gear cutting machines)

AYZENSHTADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.; KRIMMER, T.Ye.; KASHEPAV, M.Ya., kand. tekhn. nauk; MERPERT, M.P., kand. tekhn. nauk; KOPERBAKH, B.L.; CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN, B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.; MUSHTAYEV, A.F.; OGNEV, N.N.; PALEY, M.B., kand. tekhn. nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk; MECHETNER, B.Kh.; SOSENKO, A.B; AVDULOV, A.N.; LEVIN, A.A., kand.tekhn. nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A., kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn. nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof., doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, R.I., red.; CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L., tekhn. red.

[Machine-tool industry in capitalist countries] Stanko-prestroenie v kapitalisticheskikh stranakh. Pod red. i s predisl. A.P.Vladzievskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii mashinostroyeniya. 2. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov (for Vladziyevskiy, Belogur-Yasnovskaya, Chigareva, Asval'dov, Kogan).

(Machine-tool industry)

KOPERBAKH, B.L.

Precision gear-cutting machines abroad. Biul.tekh.-ekon. inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. no.9:92-96 :62. (MIRA 15:9)

(Gear-cutting machines)

KOPERBAKH, B.L.

Machines for cutting toothed racks. Biul.tekh.-ekon.inform.Gos. nauch.-issl.inst.nauch.i tekh.inform. 16 no.5:79-83'63. (MIRA 16:7)

(Machine tools)

KOPERBAKH, B.L.

Cutting gear wheels with hobbing cutters. Stan. i instr. 34 no.11:39-40 N '63. (MIRA 16:12)

HOSTOMSKA, L., dr.; KOPECKY, A., dr.; KOTTOVA, V., dr.

Determination of changes in serum cholesterol and alkaline phosphatase levels in the diagnosis and during treatment of hypothyroidism in children. Cesk.pediat. 11 no.2-3:123-127 Mar 56.

1. Z II. detsek kliniky fakulty detskeho lekarstvi v Praze, prednosta prof. Dr. J.Housek. Z detskeho oddeleni KUNZ v Praze, prim. Dr. D.Srbova.

(HYPOTHYROIDISM, in inf. and child
cholesterol & alkaline phosphatase level in blood)
(CHOLESTEROL, in blood
determ. in hypothyroidism in child)
(BLOOD
cholesterol & alkaline phosphatase determ. in hypothyroidism in child.)
(PHOSPHATASES
alkaline, determ. in blood in hypothyroidism in child)

GRUBEROVA, J.; KOPERDANOVA, E.; PLESKOVA, A.

Toxicological properties of some mixtures of dithiophosphoric acid esters. Prac. lek. 13 no.8/9:410-414 N '61.

1. Ustav hygieny prace a chorob z povolania v Bratislave, riaditel MUDr. I. Klucik.

(INSECTICIDES toxicol)

KOPERIN, F. I.

R. ŻAM.

КОРЕРИН (F.I.). О влиянии влажности древесины на ее поражаемость грибами. [The influence of wood humidity on its destruction by fungi.]—*Symp. Res. Pap. For. Tech. Inst. Archangel*, viii, pp. 37–48, 1 fig., 1946.

Evidence obtained in tests for the control of *Peniophora gigantea* [*R.A.M.*, xxvi, p. 572] and *Ceratostomella pini* [ibid., xiv, p. 68], which seriously affect stored timber in U.S.S.R., showed that the fungi do not develop at 21 per cent. wood humidity or less. *P. gigantea* grows well on pine [unspecified] at 90 to 255 per cent. wood humidity, on spruce from 90 to 190, the optimum being approximately 120 per cent. Almost complete absence of air in the wood does not prevent development of the fungi.

C. pini showed abundant growth both on pine and spruce at 30 to 70 per cent. wood humidity, but only slight development at 210 on pine and 150 on spruce, when only the peripheral wood layers were affected.

KOPERIN, F. I.

20776. Koperin, F. I. Khraneniye i sushka baiansov i rudnichnoy stoyki na skladakh lesozagotovitel'nykh predpriyatiy. Sbornik nauch. -issled. rabot (Arkhang. lesotekhn. in-T im. kuybysheva), XII, 1949, s. 53-73. Bibliogr. 7 nazv.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949.

Card : 1/1

K-40

KOPERIN, Fedor Ivanovich, prof.; FILIMONOVA, D.S., red.; BUYNOVSKAYA, N.B., tekhn. red.

[Fireproofing of wood and wood materials] Ognezashchita drevesiny i drevesnykh materialov. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo, 1963. 117 p. (MIRA 17:1)

1. Arkhangel'skiy lesotekhnicheskiy institut imeni V.V. Kuybysheva (for Koperin).

KOPERIN, Fedor Ivanovich, prof.; FEDYSHIN, Nikolay Pavlovich, st. prepod; NAUMOVA, I.A., red.

[Preparation of lumber for export] Podgotovka pilomaterialov na eksport. Arkhangel'sk, Severo-Zapadnoe knizhnoe izd-vo, 1965. 122 p. (MIRA 18:10)

1. Arkhangel'skiy lesotekhnicheskiy institut imeni V.V. Kuybysheva (for Fedyshin).

KOPERIN, Fedor Ivanovich, prof.; FILIMONOVA, D.S., red.; MELEKHOVA, L.S., tekhn. red.

[Prevention of decay in wood] Zashchita drevesiny ot gnieniia. Arkhangel'sk, Arkhangel'skoe knizhnoe izd-vo, 1961. 190 p. (MIRA 15:4)

(Wood--Preservation)

KOPERIN, V.V.; GANTMAN, V.B.; NEPOMNYASHCHAYA, T.F., redaktor; STANKOVSKIY, A.P., inzhener, redaktor; SMOL'YAKOVA, M.V., tekhnicheskiy redaktor.

[A mechanic's handbook on the operation and repair of building industry equipment] Spravochnik mekhanika po ekspluatatsii i remontu stroitel'nogo oborudovaniia. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit., 1954. 240 p. (MLRA 8:5)
(Building machinery)

BELYAYEV, Leonid Mikhaylovich; FRANTSUZOV, Yakov Leonovich; KOPERIN, V.V., inzh., nauchnyy red.; TABUNINA, M.A., red. izd-va; MOCHALINA, Z.S., tekhn. red.

[Assembly of hoisting and conveying machinery with continuous and intermittent action] Montazh pod"emno-transportnykh mashin nepreryvnogo i preryvnogo deistviia. Moskva, Gosstroiizdat, 1962. 278 p. (MIRA 15:7)
(Conveying machinery) (Hoisting machinery)

DEMAT, M.P.; IOSELOVSKIY, I.V.; KOPERIN, V.V.; NIKUL'SHIN, Yu.D.; TSUKERMAN, D.P.; KORELIN, D.S., nauchnyy red.; LYTKINA, L.S., red. izd-va; MOCHALINA, Z.S., tekhn. red.

[Planning the organization and execution of erecting work; principal designs of the rigging of equipment]Proektirovanie organizatsii i proizvodstva montazhnykh rabot; osnovnye resheniia takelazha oborudovaniia. Moskva, Gosstroiizdat, 1962. 182 p. (MIRA 15:12)

(Machinery--Erecting work)

KOPERIN, Vladislav Vladimirovich; YUSHKOV, Nikolay Ivanovich; NAUMOV, Vasiliy Grigor'yevich; TUROVSKIY, Petr Borisovich [deceased]; KORELIN, D.S., red.

[Handbook on the assembly and installation of the technological equipment in enterprises of the woodpulp and paper industry] Spravochnik po montazhu tekhnologicheskogo oborudovaniia predpriiatii tselliulozno-bumazhnoi promyshlennosti. Izd.2., perer. i dop. Moskva, Lesnaia promyshlennost', 1964. 758 p. (MIRA 17:9)

KOPERIN, Vladislav Vladimirovich; KORELIN, Dmitriy Sergeyevich; CHUMADIN, I.G., nauchn. red.; TABUNINA, M.A., red.

[Assembling equipment for enterprises of the building materials industry] Montazh oborudovaniia predpriiatii promyshlennosti stroitel'nykh materialov. Moskva, Stroiizdat, 1964. 330 p. (MIRA 17:9)

KOPERIN, Vladislav Vladimirovich; YUSHKOV, Nikolay Ivanovich; NAUMOV, Vasiliy Grigor'yevich; TUROVSKIY, Petr Borisovich. Prinimal . . . uchastiye FEL'DMAN, A.K., inzh. KORELIN, D.S., red.; MIKHAYLOVA, L.G., red.izd-va; PARAKHINA, N.L., tekhn.red.

[Manual on the assembly of technological equipment in the enterprises of the pulp and paper industry] Spravochnik po montazhu tekhnologicheskogo oborudovaniia predpriiatii tselliulozno-bumazhnoi promyshlennosti. Moskva, Goslesbumizdat, 1960. 259 p. (MIRA 14:4)

1. Trest Soyuzprombummontazh (for Fel'dman).
(Paper industry--Equipment and supplies)

KOPERIN, V.V.; KORNIYENKO, V.S., inzh., nauchn. red.; PATENOVSKAYA, M.I., red.izd-va; RODIONOVA, V.M., tekhn. red.

[Installation of metal cutting and forging press equipment] Montazh metallorezhushchego i kuznechno-pressovogo oborudovaniia. Moskva, Gosstroiizdat, 1963. 259 p.
(MIRA 17:2)

CHUMADIN, I.T., inzh.; KOFERIN, V.V., nauchn. red.; SKVORTSOVA, I.P., red. izd-va; DAUMOVA, G.D., tekhn. red.

[Industrial methods for the assmebly of equipment in cement plants] Industrial'nye metody montazha tekhnologicheskogo oborudovaniia tsementnykh zavodov. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 150 p. (MIRA 14:11)
(Cement plants—Equipment and supplies)

YEFREMENKO, V.P., inzh.; KOPERIN, V.V., inzh.; TUSHNYAKOV, M.D., inzh., nauchnyy red.; TABUNINA, M.A., red.izd-va; NAUMOVA, G.D., tekhn.red.

[Operating mobile air-compressor stations] Rabota na peredvizhnykh vozdushno-kompressornykh stantsiiakh. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 260 p. (MIRA 14:2)

1. Russia (1917- R.S.F.S.R.) Upravleniye mekhanizatsii spetsial'nykh i montazhnykh rabot.
(Air compressors)

KOPERIN, Vladislav Vladimirovich; VASIL'YEV, Vladimir Konstantinovich; KORELIN, D.S., nauchnyy red.; VDOVENKO, Z.I., red. izd-va; MOLCHALINA, Z.S., tekhn. red.

[Manufacture and assembly of industrial metal structures] Izgotovlenie i montazh tekhnologicheskikh metallokonstruktsii. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1962. 210 p. (MIRA 15:3)

(Structural frames)

RUBINOVICH, Lev Davydovich. Prinimal uchastiye KHAYKIN, Ya.K., inzh.; KOPERIN, V.V., nauchn. red.; ZHURAVLEV, B.A., red.izd-va; KASIMOV, D.Ya., tekhn. red.

[Assembly of the processing equipment in food enterprises; the meat and milk industry, refrigeration equipment] Montazh tekhnologicheskogo oborudovaniia pishchevykh predpriiatii; miaso-molochnaia promyshlennost', kholodil'nye ustanovki. Moskva, Gosstroiizdat, 1963. 315 p. (MIRA 16:8)
(Food industry--Equipment and supplies)

VOL'BERG, N.Ye.; GAYDAMAK, K.M.; DEMAT, M.P.; KOPERIN, V.V.; MOLOKANOV, A.V.; NAUMOV, V.G.; PALAGIN, A.V.; TIMOFEYEV, A.I.; FRANTSUZOV, Ya.L.; VOLNYANSKIY, A.K., glav. red.; SUDAKOV, G.G., zam. glav. red.; IOSELOVSKIY, I.V., red.; ORLOV, V.M., red.; ONKIN, A.K., red.; NIKOLAYEVSKIY, Ye.Ya., red.; MARKOV, I.I., red.; MEL'NIK, V.I., red.; STAROVEROV, I.G., red.; TUSHNYAKOV, M.D., red.; CHERNOV, A.V., red.; KRYLOV, V.A., nauchn. red.

[Assembly of technological equipment of chemical plants] Montazh tekhnologicheskogo oborudovaniia khimicheskikh zavodov. Moskva, Stroiizdat, 1964. 619 p.
(MIRA 17:11)

VOL'BERG, Nikolay Yevgen'yevich; PANKRAT'YEV, Nikolay Vasil'yevich; KOPERIN, V.V., inzh., nauchnyy red.; TABUNINA, M.A., red.izd-va; RUDAKOVA, N.I., tekhn.red.

[Assembly of compressors] Montazh kompressornykh ustanovok. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1961. 233 p. (MIRA 15:5)
(Compressors)

KOPERIN, V.V., inzh.; PAKHOMOV, N.M., inzh.

Anticorrosion work in Finland. Mont. i spets. rab. v stroi. 24 no.9:22-26 S '62. (MIRA 15:9)
(Finland--Corrosion and anticorrosives)

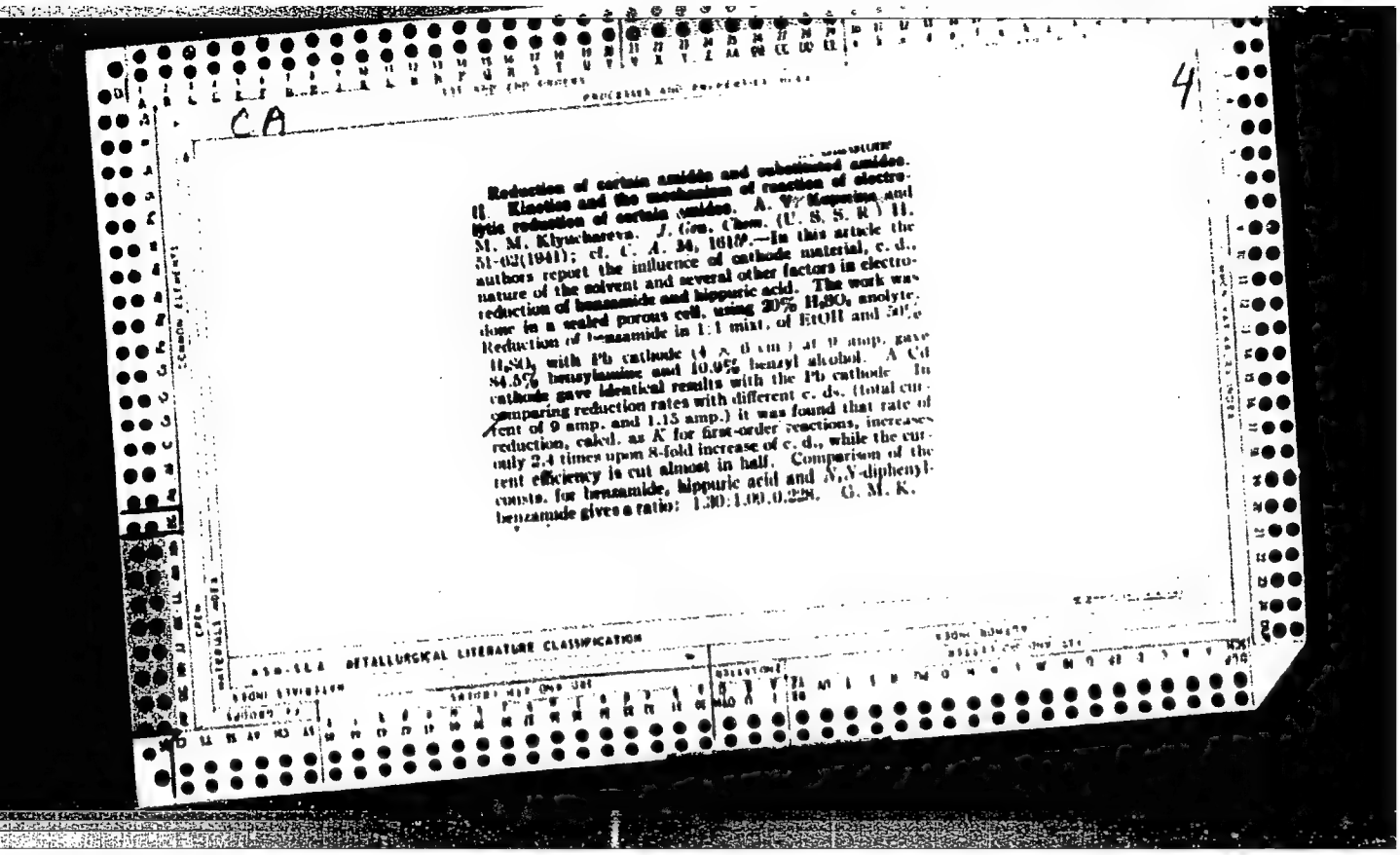
AKULOV, Aleksandr Ivanovich, kand. tekhn. nauk; SOKOL, Isaak Abramovich, inzh.; KOPERIN, V.V., inzh., nauchnyy red.; PEREVALYUK, M.V., red.izd-va; NAUMOVA, G.D., tekhn. red.

[Welding nonferrous metal pipelines]Svarka truboprovodov iz tsvetnykh metallov. Moskva, Gosstroiizdat, 1962. 140 p. (MIRA 16:3)
(Pipelines--Welding) (Nonferrous metals--Welding)

KOPERINA, A. V.

"Reduction de certains amides et amides substitues. Memoire I." Gavrilov, N. I.; Koperina, A. V. (p. 1394)

SO: Journal of General Chemistry
(Zhurnal Obshchei Khimii) 1939, Volume 9, #15

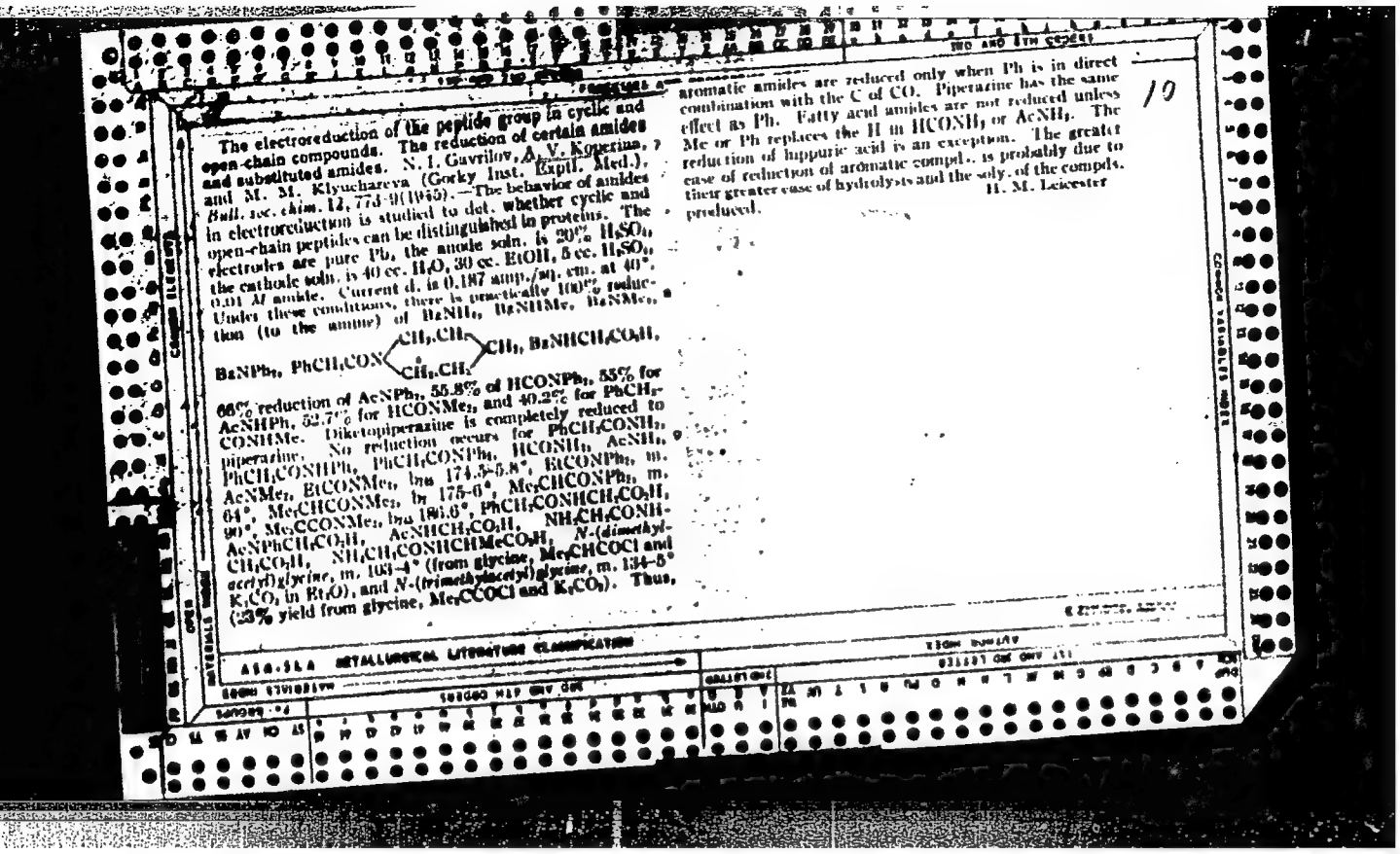


CA

4

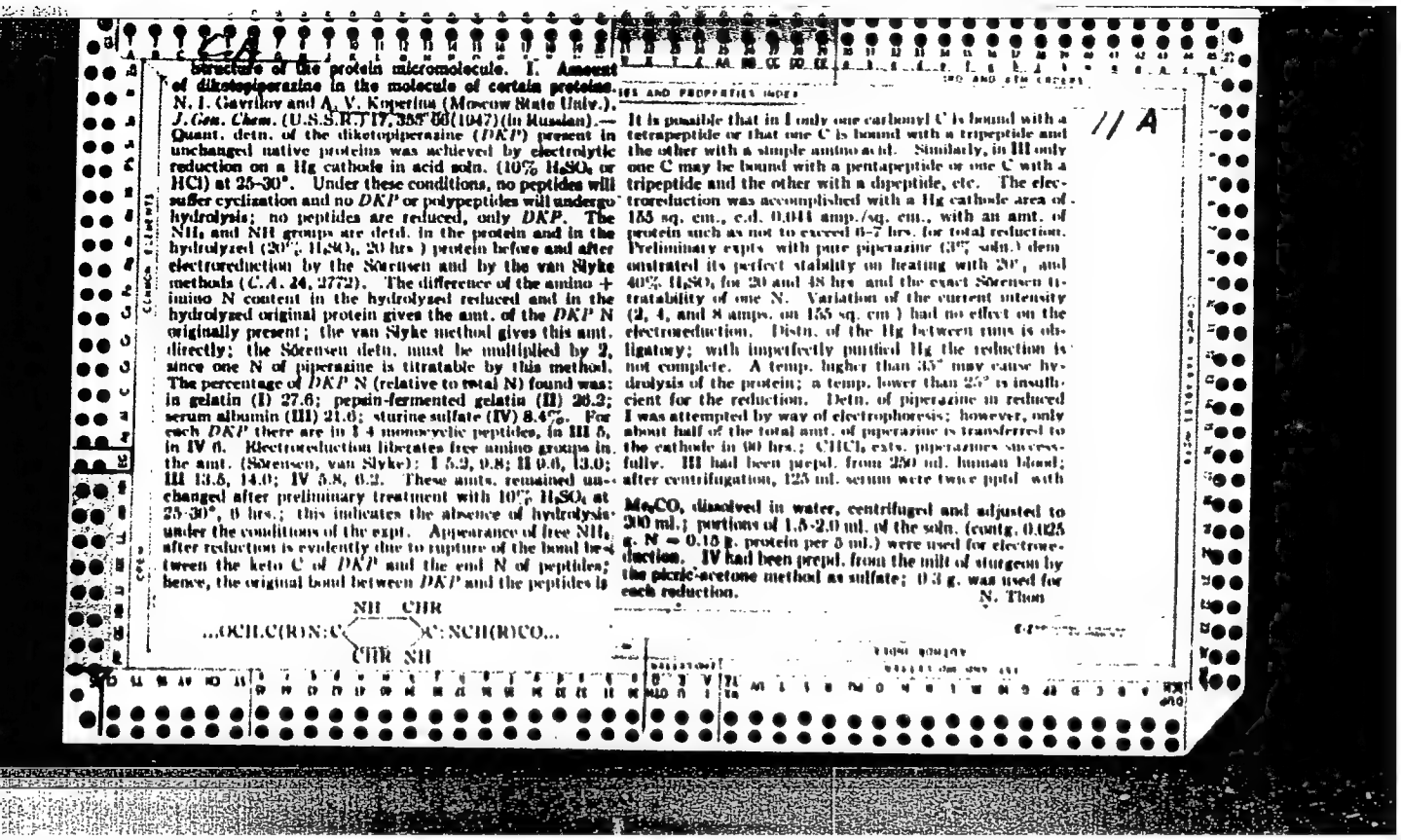
Reduction of certain amides and substituted amides. II. Kinetics and the mechanism of reaction of electrolytic reduction of certain amides. A. V. Koptyug and M. M. Klyuchareva. *J. Gen. Chem. (U. S. S. R.)* 11, 51-62(1941); cf. *C. A.* 34, 1619.—In this article the authors report the influence of cathode material, c. d., nature of the solvent and several other factors in electroreduction of benzamide and hippuric acid. The work was done in a sealed porous cell, using 20% H_2SO_4 anolyte. Reduction of benzamide in 1:1 mixt. of EtOH and 20% H_2SO_4 with Pb cathode (4 A. D. m.) at 9 amp. gave 84.5% benzylamine and 10.0% benzyl alcohol. A Cd cathode gave identical results with the Pb cathode. In comparing reduction rates with different c. ds. (total current of 9 amp. and 1.15 amp.) it was found that rate of reduction, calcd. as K for first-order reactions, increases only 2.4 times upon 8-fold increase of c. d., while the current efficiency is cut almost in half. Comparison of the consts. for benzamide, hippuric acid and *N,N*-diphenylbenzamide gives a ratio: 1.30:1.00:0.238. G. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The electroreduction of the peptide group in cyclic and open-chain compounds. The reduction of certain amides and substituted amides. N. I. Gavrilov, A. V. Koperina, and M. M. Klyucharcva (Gorky Inst. Exptl. Med.), *Bull. soc. chim.* 12, 773-9(1945).—The behavior of amides in electroreduction is studied to det. whether cyclic and open-chain peptides can be distinguished in proteins. The electrodes are pure Pb, the anode soln. is 20% H_2SO_4, the cathode soln. is 40 cc. H_2O, 30 cc. EtOH, 5 cc. H_2SO_4, 0.01 *M* amide. Current d. is 0.187 amp./sq. cm. at 40°. Under these conditions, there is practically 100% reduction (to the amine) of $BzNH_2$, $BzNHMe$, $BzNMe_2$, $BzNPh_2$, $PhCH_2CON<CH_2.CH_2>CH_2$, $BzNHCH_2CO_2H$, 66% reduction of $AcNPh_2$, 55.8% of $HCONPh_2$, 55% for $AcNHPh$, 52.7% for $HCONMe_2$, and 40.2% for $PhCH_2CONHMe$. Diketopiperazine is completely reduced to piperazine. No reduction occurs for $PhCH_2CONH_2$, $PhCH_2CONHPh$, $PhCH_2CONPh_2$, $HCONH_2$, $AcNH_2$, $AcNMe_2$, $EtCONMe_2$, bis 174.5-5.8°, $EtCONPh_2$, m. 64°, $Me_2CHCONMe_2$, bp 175-6°, $Me_2CHCONPh_2$, m. 90°, $Me_3CCONMe_2$, bp 186.6°, $PhCH_2CONHCH_2CO_2H$, $AcNPhCH_2CO_2H$, $AcNHCH_2CO_2H$, $NH_2CH_2CONH-CH_2CO_2H$, $NH_2CH_2CONHCHMeCO_2H$, *N*-(*dimethylacetyl*)*glycine*, m. 103-4° (from glycine, $Me_2CHCOCl$ and K_2CO_3 in Et_2O), and *N*-(*trimethylacetyl*)*glycine*, m. 134-5° (23% yield from glycine, Me_3CCOCl and K_2CO_3). Thus, aromatic amides are reduced only when Ph is in direct combination with the C of CO. Piperazine has the same effect as Ph. Fatty acid amides are not reduced unless Me or Ph replaces the H in $HCONH_2$ or $AcNH_2$. The reduction of hippuric acid is an exception. The greater case of reduction of aromatic compds. is probably due to their greater ease of hydrolysis and the solv. of the compds. produced.

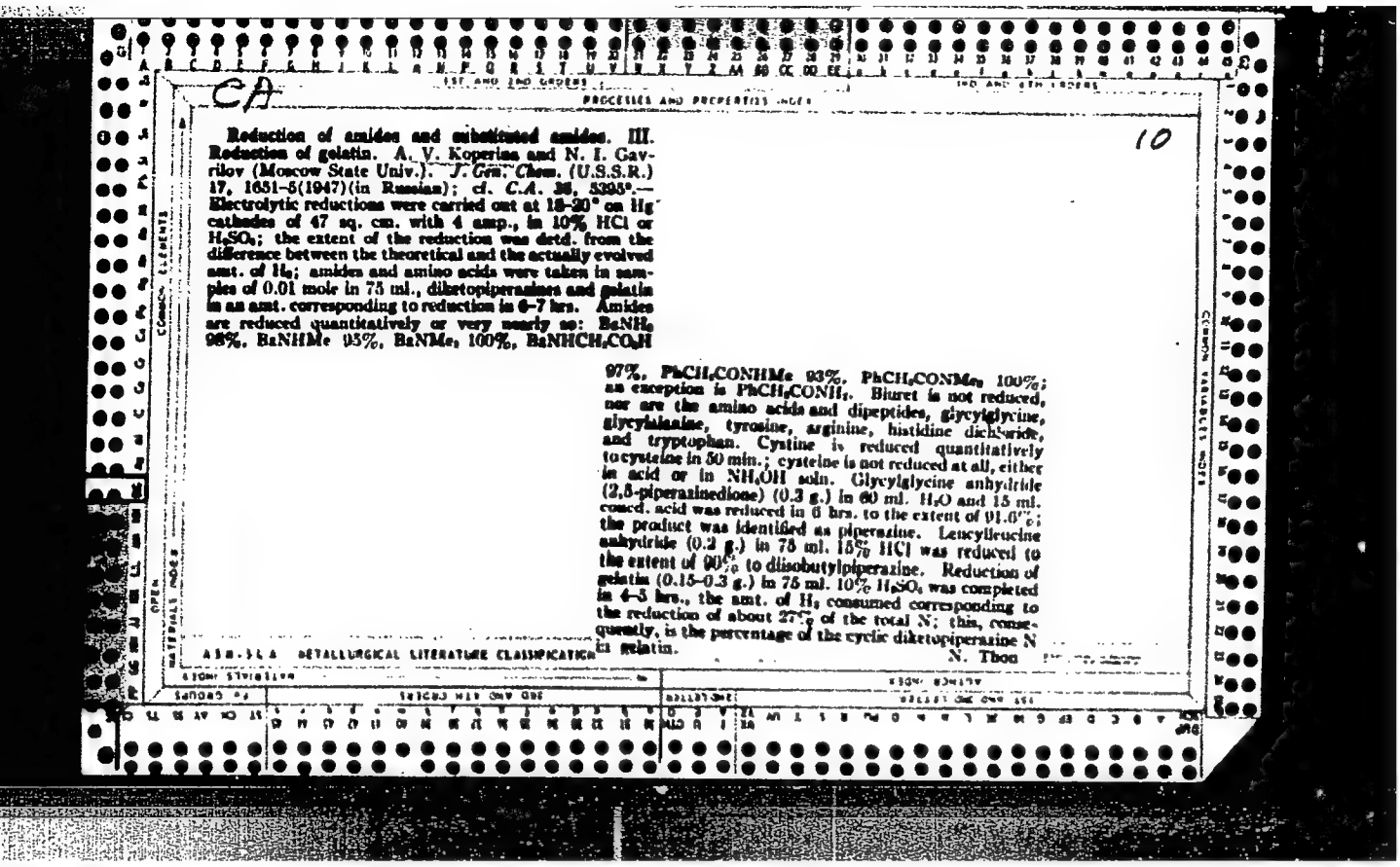
H. M. Leicester



Structure of the protein micromolecule. I. Amount of diketopiperazine in the molecule of certain proteins. N. I. Gavrilov and A. V. Kopertina (Moscow State Univ.). *J. Gen. Chem.* (U.S.S.R.) 17, 385–96 (1947) (in Russian).— Quant. detn. of the diketopiperazine (*DKP*) present in unchanged native proteins was achieved by electrolytic reduction on a Hg cathode in acid soln. (10% H_2SO_4 or HCl) at 25–30°. Under these conditions, no peptides will suffer cyclization and no *DKP* or polypeptides will undergo hydrolysis; no peptides are reduced, only *DKP*. The NH_2 and NH groups are detd. in the protein and in the hydrolyzed (20% H_2SO_4, 20 hrs.) protein before and after electroreduction by the Sörensen and by the van Slyke methods (*C.A.* **24**, 2772). The difference of the amino + imino N content in the hydrolyzed reduced and in the hydrolyzed original protein gives the amt. of the *DKP* N originally present; the van Slyke method gives this amt. directly; the Sörensen detn. must be multiplied by 2, since one N of piperazine is titratable by this method. The percentage of *DKP* N (relative to total N) found was: in gelatin (I) 27.6; pepsin-fermented gelatin (II) 26.2; serum albumin (III) 21.6; sturine sulfate (IV) 8.4%. For each *DKP* there are in I 4 monocyclic peptides, in III 5, in IV 6. Electroreduction liberates free amino groups in the amt. (Sörensen, van Slyke): I 5.3, 0.8; II 0.6, 13.0; III 13.5, 14.0; IV 5.8, 0.2. These amts. remained unchanged after preliminary treatment with 10% H_2SO_4 at 25–30°, 6 hrs.; this indicates the absence of hydrolysis under the conditions of the expt. Appearance of free NH_2 after reduction is evidently due to rupture of the bond between the keto C of *DKP* and the end N of peptides; hence, the original bond between *DKP* and the peptides is

It is possible that in I only one carbonyl C is bound with a tetrapeptide or that one C is bound with a tripeptide and the other with a simple amino acid. Similarly, in III only one C may be bound with a pentapeptide or one C with a tripeptide and the other with a dipeptide, etc. The electroreduction was accomplished with a Hg cathode area of 155 sq. cm., c.d. 0.011 amp./sq. cm., with an amt. of protein such as not to exceed 6–7 hrs. for total reduction. Preliminary expts. with pure piperazine (3% soln.) demonstrated its perfect stability on heating with 20%, and 40% H_2SO_4, for 20 and 48 hrs. and the exact Sörensen titratability of one N. Variation of the current intensity (2, 4, and 8 amps. on 155 sq. cm.) had no effect on the electroreduction. Distn. of the Hg between runs is obligatory; with imperfectly purified Hg the reduction is not complete. A temp. higher than 35° may cause hydrolysis of the protein; a temp. lower than 25° is insufficient for the reduction. Detn. of piperazine in reduced I was attempted by way of electrophoresis; however, only about half of the total amt. of piperazine is transferred to the cathode in 90 hrs.; $CHCl_3$ exts. piperazines successfully. III had been prepd. from 250 ml. human blood; after centrifugation, 125 ml. serum were twice pptd. with Me_2CO, dissolved in water, centrifuged and adjusted to 300 ml.; portions of 1.5–2.0 ml. of the soln. (contg. 0.025 g. N = 0.15 g. protein per 5 ml.) were used for electroreduction. IV had been prepd. from the milt of sturgeon by the picric-acetone method as sulfate; 0.3 g. was used for each reduction.

N. Thon

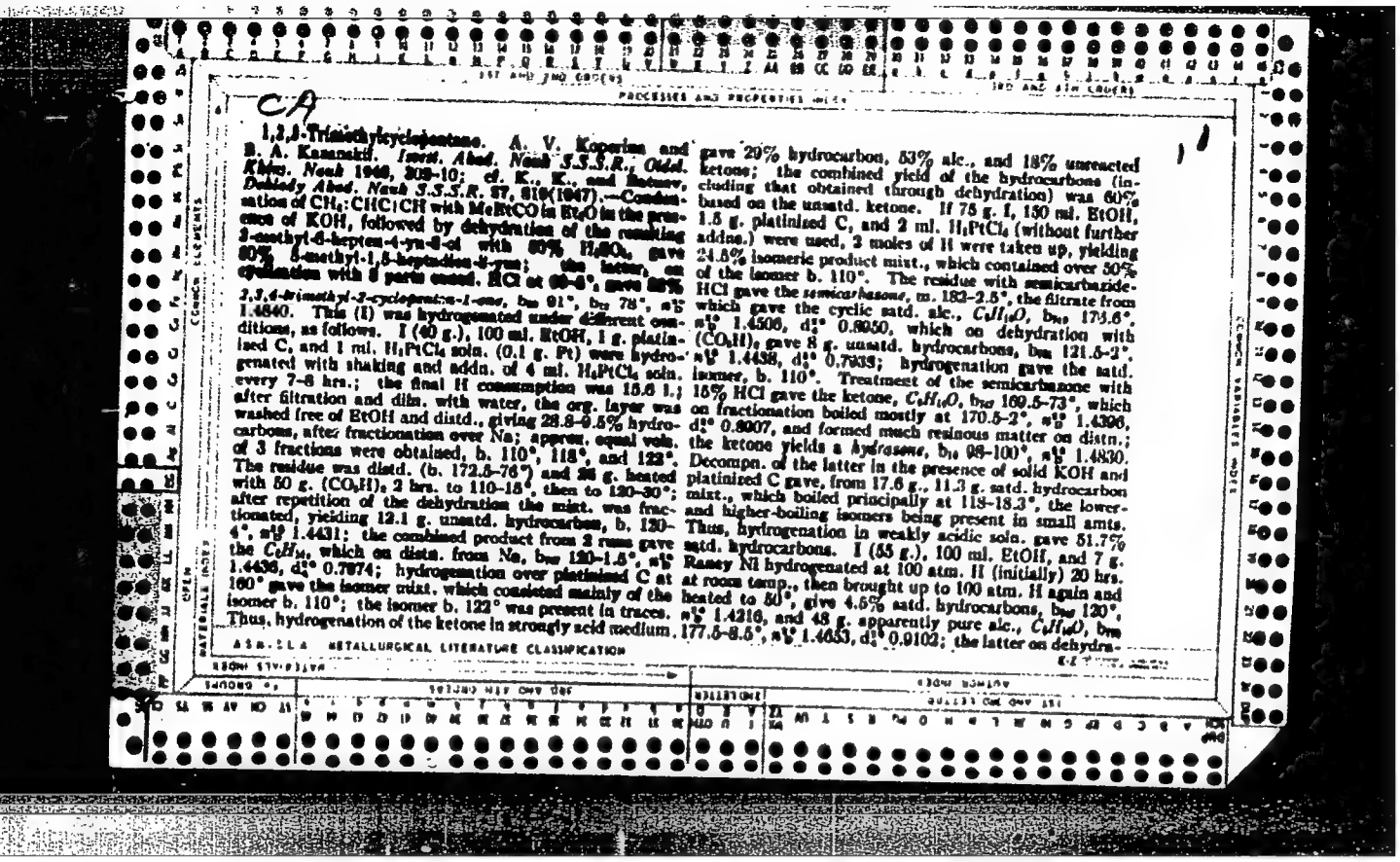


CA

10

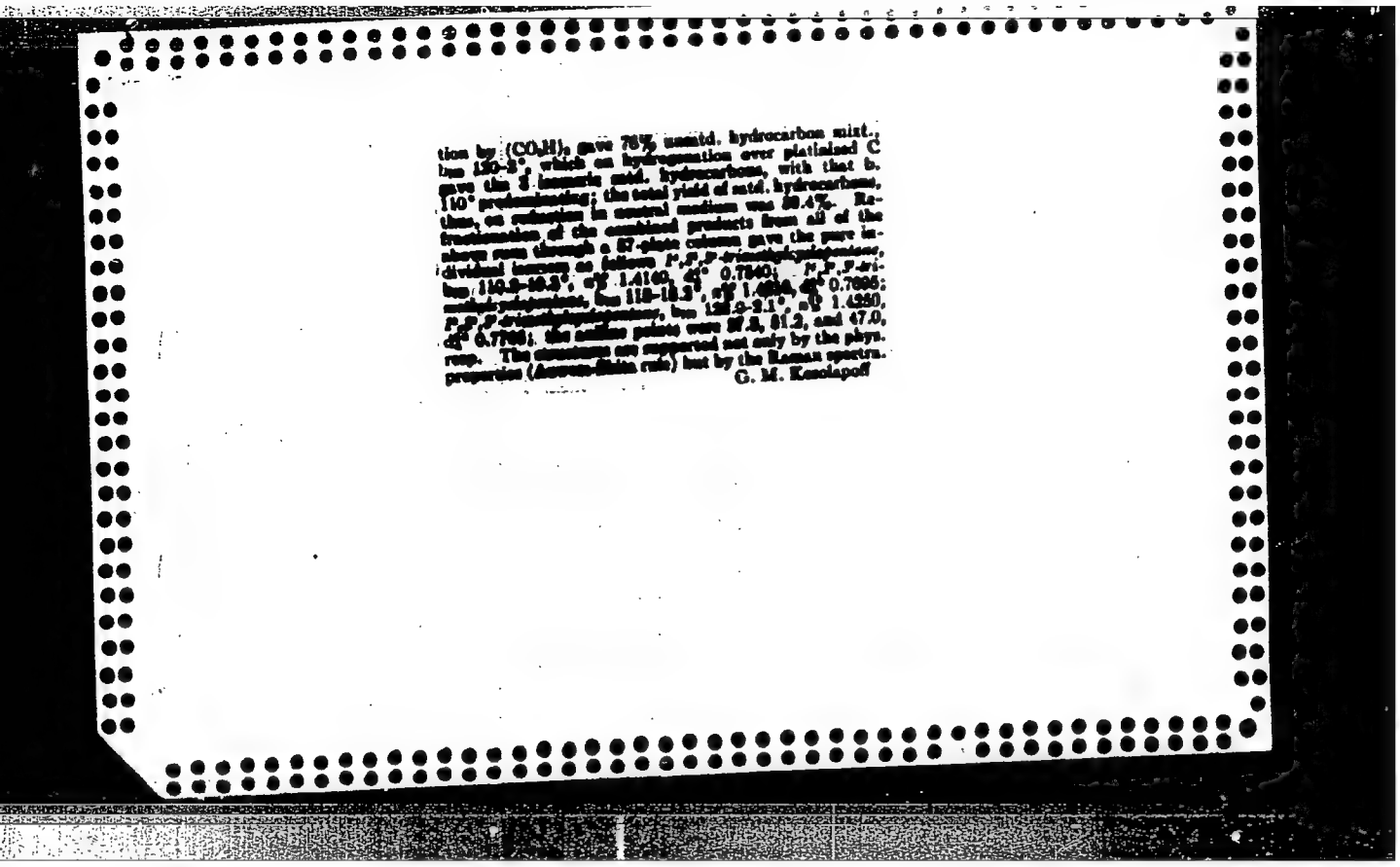
Reduction of amides and substituted amides. III. Reduction of gelatin. A. V. Koperina and N. I. Gavrilov (Moscow State Univ.). *J. Gen. Chem. (U.S.S.R.)* 17, 1651–5(1947)(in Russian); cf. *C.A.* 38, 5395°.—Electrolytic reductions were carried out at 18–20° on Hg cathodes of 47 sq. cm. with 4 amp., in 10% HCl or H_2SO_4; the extent of the reduction was detd. from the difference between the theoretical and the actually evolved amt. of H_2; amides and amino acids were taken in samples of 0.01 mole in 75 ml., diketopiperazines and gelatin in an amt. corresponding to reduction in 6–7 hrs. Amides are reduced quantitatively or very nearly so: $BzNH_2$ 98%, BzNHMe 95%, $BzNMe_2$ 100%, $BzNHCH_2CO_2H$ 97%, $PhCH_2CONHMe$ 93%, $PhCH_2CONMe_2$ 100%; an exception is $PhCH_2CONH_2$. Biuret is not reduced, nor are the amino acids and dipeptides, glycylglycine, glycylalanine, tyrosine, arginine, histidine dichloride, and tryptophan. Cystine is reduced quantitatively to cysteine in 50 min.; cysteine is not reduced at all, either in acid or in NH_4OH soln. Glycylglycine anhydride (2,5-piperazinedione) (0.3 g.) in 60 ml. H_2O and 15 ml. concd. acid was reduced in 6 hrs. to the extent of 91.6%; the product was identified as piperazine. Leucylleucine anhydride (0.2 g.) in 75 ml. 15% HCl was reduced to the extent of 90% to diisobutylpiperazine. Reduction of gelatin (0.15–0.3 g.) in 75 ml. 10% H_2SO_4 was completed in 4–5 hrs., the amt. of H_2 consumed corresponding to the reduction of about 27% of the total N; this, consequently, is the percentage of the cyclic diketopiperazine N in gelatin.

N. Thon



CA

1,2,3-Trimethylcyclopentane. A. V. Kopeiva and B. A. Kazanskii. *Inst. Khim. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1948, 309–10; *cf.* K., K., and Rotarev, *Doklady Akad. Nauk S.S.S.R.* 57, 819(1947).—Condensation of CH_3:CHC:CH with MeEtCO in Et_2O in the presence of KOH, followed by dehydration of the resulting 3-methyl-6-hepten-4-yn-3-ol with 60% H_2SO_4, gave 80% 5-methyl-1,5-heptadien-3-yne; the latter, on cyclization with 6 parts concd. HCl at 60–5°, gave 88% *2,3,4-trimethyl-3-cyclopenten-1-one*, b_{760} 91°, b_{22} 78°, n_D^{20} 1.4640. This (I) was hydrogenated under different conditions, as follows. I (40 g.), 100 ml. EtOH, 1 g. platinized C, and 1 ml. H_2PtCl_6 soln. (0.1 g. Pt) were hydrogenated with shaking and addn. of 4 ml. H_2PtCl_6 soln. every 7–8 hrs.; the final H consumption was 15.6 l.; after filtration and dilu. with water, the org. layer was washed free of EtOH and distd., giving 28.8–6.5% hydrocarbons, after fractionation over Na; approx. equal vols. of 3 fractions were obtained, b. 110°, 118°, and 122°. The residue was distd. (b. 172.5–76°) and 26 g. heated with 50 g. $(CO_2H)_2$ 2 hrs. to 110–15°, then to 120–30°; after repetition of the dehydration the mixt. was fractionated, yielding 12.1 g. unsatd. hydrocarbon, b. 120–4°, n_D^{20} 1.4431; the combined product from 2 runs gave the C_8H_{14}, which on distn. from Na, b_{760} 120–1.5°, n_D^{20} 1.4436, d_4^{20} 0.7874; hydrogenation over platinized C at 160° gave the isomer mixt. which consisted mainly of the isomer b. 110°; the isomer b. 122° was present in traces. Thus, hydrogenation of the ketone in strongly acid medium gave 29% hydrocarbon, 53% alc., and 18% unreacted ketone; the combined yield of the hydrocarbons (including that obtained through dehydration) was 60% based on the unsatd. ketone. If 75 g. I, 150 ml. EtOH, 1.5 g. platinized C, and 2 ml. H_2PtCl_6 (without further addns.) were used, 3 moles of H were taken up, yielding 24.5% isomeric product mixt., which contained over 50% of the isomer b. 110°. The residue with semicarbazide-HCl gave the *semicarbazone*, m. 182–2.5°, the filtrate from which gave the cyclic satd. alc., $C_8H_{16}O$, b_{760} 175.6°, n_D^{20} 1.4506, d_4^{20} 0.8950, which on dehydration with $(CO_2H)_2$ gave 8 g. unsatd. hydrocarbons, b_{760} 121.5–2°, n_D^{20} 1.4438, d_4^{20} 0.7633; hydrogenation gave the satd. isomer, b. 110°. Treatment of the semicarbazone with 15% HCl gave the ketone, $C_8H_{14}O$, b_{20} 169.5–73°, which on fractionation boiled mostly at 170.5–2°, n_D^{20} 1.4396, d_4^{20} 0.8007, and formed much resinous matter on distn.; the ketone yields a *hydrazone*, b_{15} 98–100°, n_D^{20} 1.4830. Decompn. of the latter in the presence of solid KOH and platinized C gave, from 17.6 g., 11.3 g. satd. hydrocarbon mixt., which boiled principally at 118–18.3°, the lower- and higher-boiling isomers being present in small amts. Thus, hydrogenation in weakly acidic soln. gave 51.7% satd. hydrocarbons. I (55 g.), 100 ml. EtOH, and 7 g. Raney Ni hydrogenated at 100 atm. H (initially) 20 hrs. at room temp., then brought up to 100 atm. H again and heated to 80°, give 4.6% satd. hydrocarbons, b_{760} 120°, n_D^{20} 1.4216, and 48 g. apparently pure alc., $C_8H_{16}O$, b_{760} 177.5–8.5°, n_D^{20} 1.4653, d_4^{20} 0.9102; the latter on dehydra-



tion by $(CO_2H)_2$ gave 78% unsatd. hydrocarbon mixt., bp 150–3°, which on hydrogenation over platinized C gave the 3 isomeric satd. hydrocarbons, with that b. 110° predominating; the total yield of satd. hydrocarbons, thus, on reduction in neutral medium was 59.4%. Refractionation of the combined products from all of the above runs through a 57-plate column gave the pure individual isomers as follows: *p,p,p*-trimethylpentanes, bp 110.2–10.3°, $n^{25}D$ 1.4140, d^{25}_4 0.7040; *p,p,p*-trimethylpentenes, bp 113–13.3°, $n^{25}D$ 1.4264, d^{25}_4 0.7095; *p,p,p*-trimethylcyclopentane, bp 128.9–9.1°, $n^{25}D$ 1.4250, d^{25}_4 0.7981. The melting points were 57.8, 61.2, and 47.0, resp. The structures are supported not only by the physical properties (Ascoop-Blaise rule) but by the Raman spectra.

G. M. Kosolapoff

KOPERINA, A. V.

PA 7/49T11

USSR/Chemistry - Synthesis May/Jun 49
Chemistry - Cyclopentane, 1,2,3-
Trimethyl

"Work on 1, 2, 3-Trimethylcyclopentane," A. V. Koperina, B. A. Kazanskiy, Inst of Org Chem, Acad Sci USSR, 9 pp

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 3

Describe synthesis of 1, 2, 3-trimethylcyclopentane, starting from 3-methylheptene-6-in-4-ol by dehydration to diene, and cyclization of the latter into trimethylcyclopentanone by I. N. Nazarov's method. Describe division of 1, 2, 3-trimethylcyclopentane into stereoisomers.

7/49T11

USSR/Chemistry - Synthesis (Contd) May/Jun 49

Submitted 19 Sep 1947.

7/49T11

KOPERINA, A. V.

B. A. Kazanskii, A. V. Koperina and M. I. Batnev, Hydration of cyclopentane hydrocarbons with splitting of the cycle. XI. The hydration of stereoisomeric 1,2,3-trimethyl-cyclopentanes. P. 503.

During hydration of stereoisomeric 1,2,3-trimethyl-cyclopentanes, there is observed a transition of each one of them into the mixture of stereoisomers (always with a predominance of 1^c, 2^t, 3^c-trimethylcyclopentane) and a partial splitting of the five numbered cycle with formation of 2,3,4-trimethylpentane.

Inst. of Organic Chemistry of the
Acad. of Sci. USSR
December 25, 1947

SO: Bulletin of the U.S.S.R. Academy of Sciences (Chemistry Series)
Izvestia Akad. Nauk, S.S.S.R., No. 5, 1948.

USSR/Chemistry - Cyclopentane, Derivatives Sep 48
Chemistry - Bicyclo-(1,2,2,)-Heptane

"Structure of Bicyclo-(1,2,2)-Heptane," Acad B. A. Kazanskiy, A. V. Koperina, M. I. Batuyev, 4 pp

"Dok Ak Nauk SSSR" Vol LXII, No 3

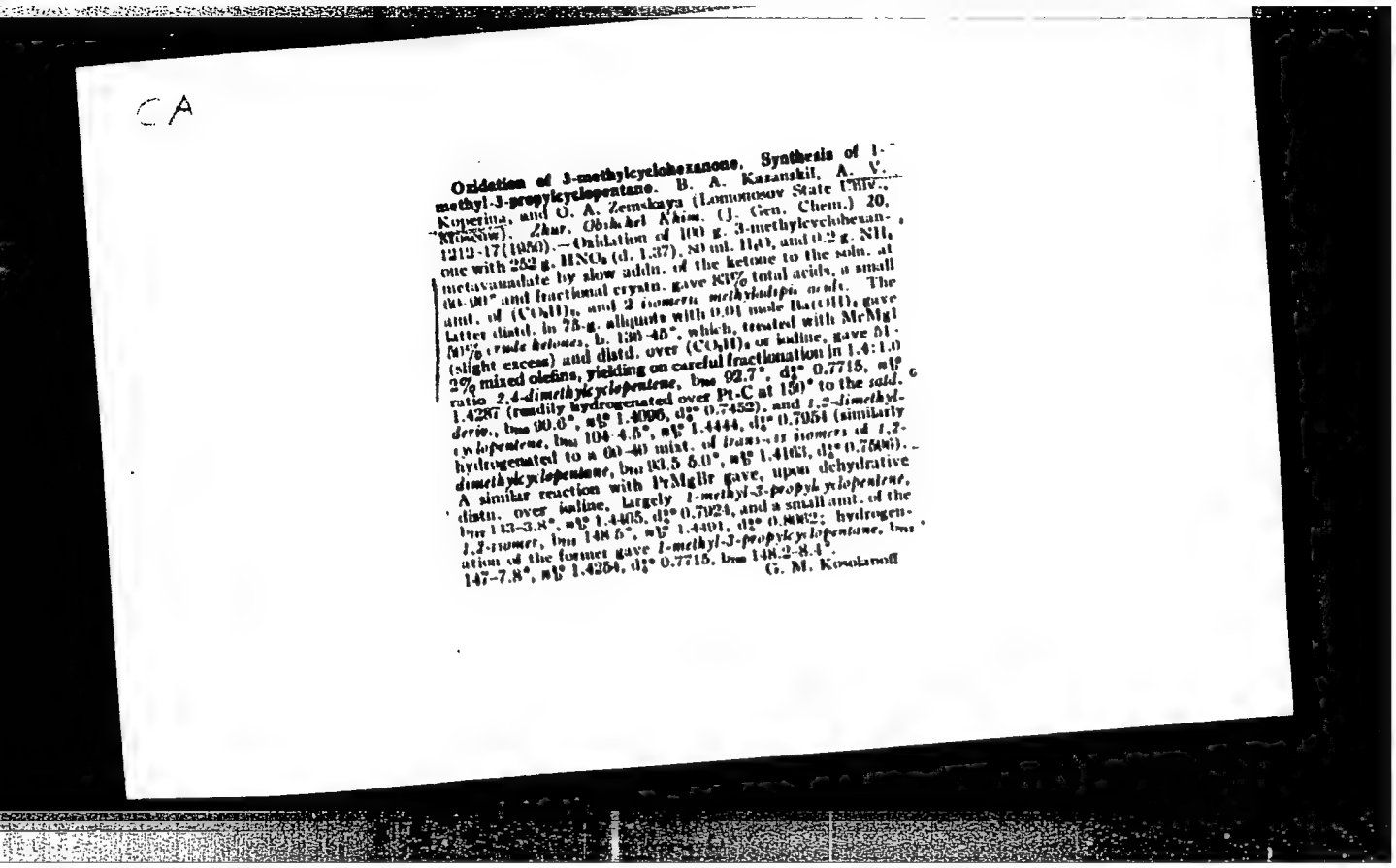
Discussion of experimental data on conversions of bicyclo-(1,2,2)-heptane, largely obtained in authors' laboratory, points out that it should be considered a cyclopentane derivative and not a cyclohexane with a methylene bridge connecting carbons 1 and 4. Submitted 6 Aug 48.

36/40T13

[redacted] 26/hcmx

Koperina, A. V.

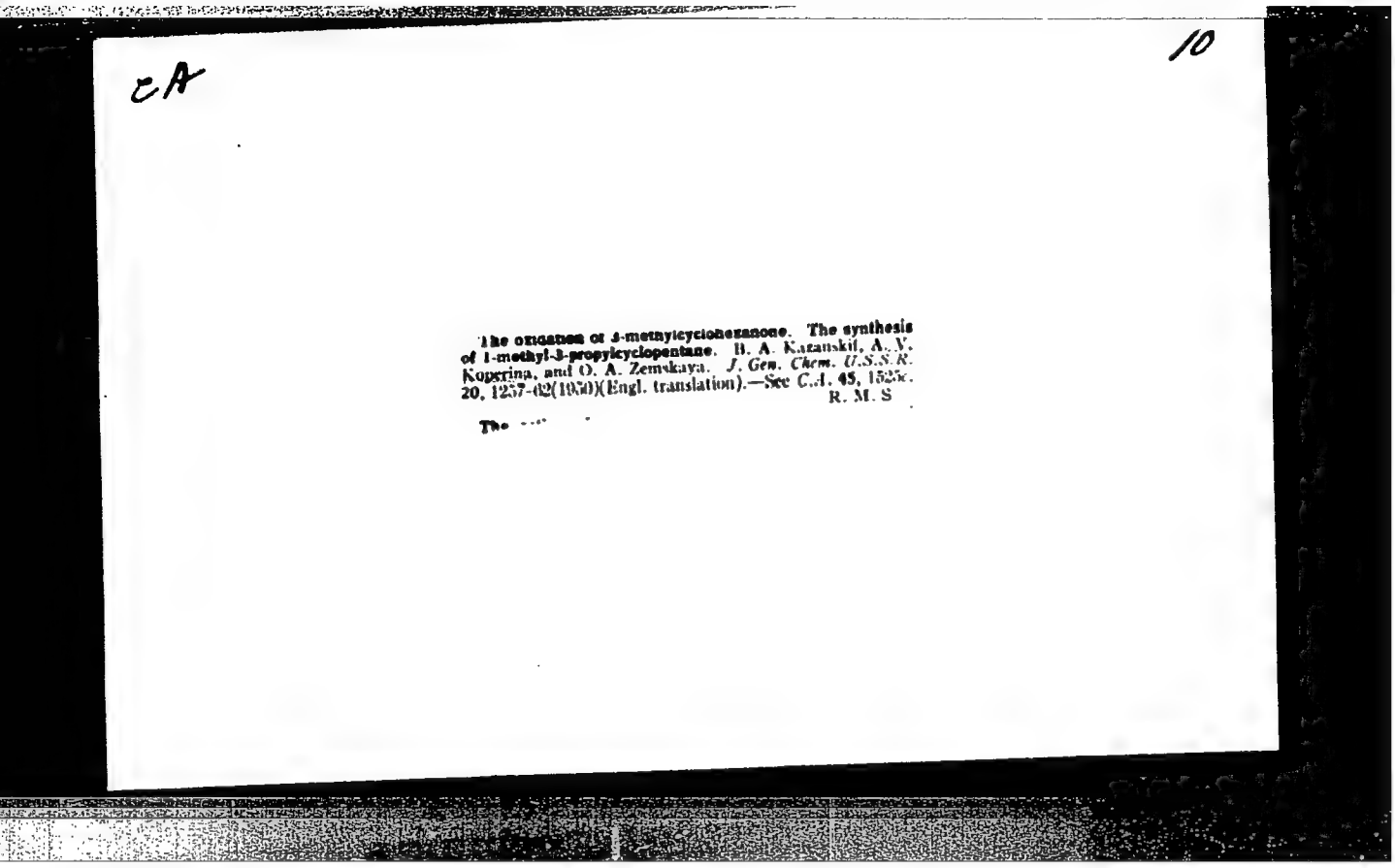
Bazhulin, P. A., Ukholin, S. A., Eulanova, T. F., Koperina, A. V. CA: 44-1331/e
Plate, A. F. and Kazanskiy, B. A.
Izvest. Akad. Nauk SSSR, Otdel Khim. Nauk 1949, 481-6
Optical investigation of hydrocarbons. V. Raman spectra of some napthenes and nonanes.



CA

Oxidation of 3-methylcyclohexanone. Synthesis of 1-methyl-3-propylcyclopentane. B. A. Kazanskii, A. V. Kogerina, and O. A. Zemskaya (Lomonosov State Univ., Moscow). *Zhur. Obshchei Khim.* (J. Gen. Chem.) 20, 1213-17(1950).—Oxidation of 100 g. 3-methylcyclohexanone with 252 g. HNO_3 (d. 1.37), 80 ml. H_2O, and 0.2 g. NH_4 metavanadate by slow addn. of the ketone to the soln. at 60-90° and fractional crystn. gave 83% total acids, a small amt. of $(CO_2H)_2$, and 2 *isomeric methyladipic acids*. The latter distd. in 75-g. aliquots with 0.01 mole $Ba(OH)_2$ gave 70% *crude ketones*, b. 130-45°, which, treated with MeMgI (slight excess) and distd. over $(CO_2H)_2$ or iodine, gave 51-2% mixed olefins, yielding on careful fractionation in 1.4:1.0 ratio *2,4-dimethylcyclopentene*, bp 92.7°, d_4^{20} 0.7718, n_D^{20} 1.4287 (readily hydrogenated over Pt-C at 15°) to the *satd. deriv.*, bp 90.0°, n_D^{20} 1.4096, d_4^{20} 0.7452), and *1,2-dimethylcyclopentene*, bp 104-4.5°, n_D^{20} 1.4444, d_4^{20} 0.7954 (similarly hydrogenated to a 60-40 mixt. of *trans-cis isomers* of *1,2-dimethylcyclopentane*, bp 93.5-5.0°, n_D^{20} 1.4163, d_4^{20} 0.7586). A similar reaction with PrMgBr gave, upon dehydrative distn. over iodine, largely *1-methyl-3-propylcyclopentene*, bp 143-3.8°, n_D^{20} 1.4405, d_4^{20} 0.7924, and a small amt. of the *1,2-isomer*, bp 148.5°, n_D^{20} 1.4491, d_4^{20} 0.8002; hydrogenation of the former gave *1-methyl-3-propylcyclopentane*, bp 147-7.8°, n_D^{20} 1.4264, d_4^{20} 0.7715, bp 148.2-8.4°.

G. M. Kosolapoff



CA

10

The organics of 3-methylcyclohexanone. The synthesis of 1-methyl-3-propylcyclopentane. B. A. Kazanskii, A. V. Kopyrina, and O. A. Zemskaya. *J. Gen. Chem. U.S.S.R.* 20, 1257-62(1950)(Engl. translation).—See *C.A.* 45, 1525c.
R. M. S

The ...

CA

10

1,3 Dimethylcyclopentane A. A. Kapustina, I. M. Naumova, and B. A. Kazanskii (M. V. Lomonosov State Univ., Moscow). *Zhur. Obshchei Khim.* (J. Gen. Chem.) **20**, 1498–1503(1950).—*2-Methyl-5-hexen-3-yn-2-ol*, b_{20} 69°, dehydrated with 50% H_2SO_4 at 50–60°, gave 68.5%; *3-methyl-1,5-hexadien-3-yne*, b_{10} 45–7°, n_D^{20} 1.4980. Hydration by heating with $HgSO_4$ in 90% MeOH with H_2SO_4 gave a mixt. of $CH_2:CMeCOCH_2CH:CH_2$ and *MeCl ketones*, b_{14} 92–100°, which was cyclized by H_3PO_4 (d. 1.73), yielding 47%; *2,4-dimethyl-2-cyclopenten-1-one*, b_{10} 71–3°, n_D^{20} 1.4650. Hydrogenation in EtOH with Pt-C and in the presence of a little H_2PtCl_6 gave rapid addn. of 2.1 moles H and yielded, after fractionation, 24%, *hydrocarbon*, C_7H_{14}, b_{760} 90.5°, n_D^{20} 1.4084, d_4^{20} 0.7457, and 60%, *2,4-dimethylcyclopentanol*, b_{10} 150–61°, n_D^{20} 1.4418, d_4^{20} 0.8902. Hydrogenation with Raney Ni in EtOH at 100 atm. H at 85° utilized 2 moles H and gave 85% of the *latter alc.* only, b_{10} 155–7°, n_D^{20} 1.4473. Dehydration of the alc. with $(CO_2H)_2$ at 115° gave 78–81% *unsatd. hydrocarbon*, which had the same consts., b_{760} 92.7–2.8°, n_D^{20} 1.4288, d_4^{20} 0.7714, regardless of the source of the alc. This *2,4-dimethylcyclopentene* on hydrogenation over Pt-C in EtOH took up 1 mole H and gave a *1,3-dimethylcyclopentane*, b_{760} 90.5°, n_D^{20} 1.4085, d_4^{20} 0.7454, also formed by vapor-phase hydrogenation over Pt-C at 160°; its properties checked those of the hydrocarbon product of hydrogenation of the ketone (above). The possibility of stereoisomers in this prepn. has not been cleared up. G. M. K.

KOPERINA, A. V.

USSR/ Chemistry Spectral analysis

Card : 1/1 Pub. 40 - 20/27

Authors : Bazhulin, P. A., Koperina, A. V., Liberman, A. L., Ovodova, V. A., and Kazanskiy, B. A.

Title : Optical method of studying hydrocarbons. Part 7.- Combined diffusion spectra of certain naphthenes

Periodical : Izv. AN SSSR. Otd. khim. nauk 4, 709 - 715, July - August 1954

Abstract : Combined diffusion spectra of seven cyclopentane and cyclohexane hydrocarbons, were investigated and the intensities of the spectral lines in the maximum state were determined photometrically. The spatial orientation of side chains in naphthenes and stereoisomers, was determined on the basis of spectroscopic data. Tables, showing the frequency and intensity of spectral lines of the investigated naphthenes, are included. Ten references: 8 USSR and 2 USA (1941 - 1951). Tables; diagrams.

Institution : Acad. of Sc. USSR, The N. D. Zelinskiy Institute of Organic Chemistry

Submitted : August 30, 1953

PA 59/49T8

KOPERINA, V. V.

USSR/Geology Mar/Apr 49
Coal
Lithology

"Lithology and Genesis of Coal-Bearing Layers of Karagay Deposits in the Kuznetsk Basin," V. V. Koperina, 18 pp

"Iz Ak Nauk SSSR, Ser Geol" No 2

Makes some conclusions on conditions necessary for formation of coal-bearing layers of Karagay deposits based on detailed studies of rocks in coal-bearing strata, their mechanical, mineralogical and chemical properties, plant remains and fauna, and a thorough analysis of stratification.

59/49T8

KOPERINA, V. V.

"Lithological Composition and Formation Conditions of the Middle Part of Kol'chugino Stratum in the Kuznets Basin." Sub 10 Jan 51, Moscow Geological Prospecting Inst.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

KOPERINA, V. V.

Mineralogy, Determinative

Accuracy of mineralogical analysis. Dokl. AN SRR 85, no. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified

USSR/~~Geophysics~~ - Coal
Geology

21 Feb 53

KOPERINA, V. V.

"New Data on the Stratigraphy and Lithology of the Upper Part of the Coal-Bearing Deposits of the Carboniferous in the Karagandi~~nskiy~~ Basin," V. V. Koperina

DAN
~~"Dok Ak Nauk~~ SSSR", Vol ~~LXXVIII~~ 88, No 6, pp 1035-1038

According to M. O. Borsuk, the upper part of the coal-bearing strata is florally similar to that of the lower-lying karagandi~~nskiy~~ formation, and the lowest boundary of the Westphalian layer is the middle of the karagandi~~nskiy~~ layer. Presented by D. V. Nalivkin, Acad.

KOPERINA, V.V.

Lithology, stratigraphy, and coal measures of the upper part of the Carboniferous coal-bearing deposits in Karaganda Basin. Trudy Lab. geol.ugl. no.2:252-270 '54. (MLRA 8:7)
(Karaganda Basin--Coal geology)
(Karaganda Basin--Geology, Stratigraphic)

KOPERINA, V.V.

Composition and formation of the supra-Karaganda, Dolinskiy, supra-Dolinskiy, and Shakhanskiy series of the Karaganda Basin. Trudy Lab.geol.ugl. no.4:5-102 '56. (MLRA 9:10)

(Karaganda Basin--Geology, Stratigraphic)
(Karaganda Basin--Coal geology)

ISHINA, T.A.; KOPERINA, V.V.; RENGARTEN, N.V.; SLATVINSKAYA, Ye.A.

Using the facies analytical method in geological prospecting operations. Trudy Lab.geol.ugl. no.5:153-160 '56. (MLRA 9:8)

1. Laboratoriya geologii uglya AN SSSR.
(Coal geology) (Prospecting)

KOTERINA, V.V.

AUTHOR: Zhemchuzhnikov, Yu.A.

TITLE: Similarities and Differences of Features Between Facies, Facies-Cyclic and Facies-Geotectonic Methods of Studying Coal-Bearing Strata (Skhodstvo i razlichiya mezhdu fatsial'nym, fatsial'no-tsiklicheskim i fatsial'no-geotektonicheskim metodami izucheniya uglenosnykh tolshch)

11-1-1/29

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, 1958, # 1, pp 3-11 (USSR)

ABSTRACT:

At the second Coal Geological Conference held in March 1955, the lectures of G.A. Ivanov, T.A. Ishina, V.V. Koperina, N.V. Rengarten and others dealt with different methods of examining coal-bearing strata. G.A. Ivanov and the author belong to a group of geologists who regard periodicity as one of the most important features of coal-bearing strata. The author elaborates on the similarities and differences existing between his views and those of G.A. Ivanov. Ivanov proposes to conduct the observations first of the facies, and afterwards of geotectonics, and therefore his method is called the facial-geotectonic method. However, his method starts with the differentiation according to granulometric differences, whereby coal and limestone are regarded as the

Card 1/4

Similarities and Differences of Features Between Facies, Facies-Cyclic and Facies-Geotectonic Methods of Studying Coal Bearing Strata

rocks with the finest granules. G.A. Ivanov emphasizes that his proposed facial-geotectonic method based on granulometric examinations and on the development of marked facies can chiefly be used by geologists prospecting for coal. G.A. Ivanov sees the essential difference between his method and the facial-cyclical analysis in the fact, that his method does not require the difficult separation and determination of numerous types of lithological rocks and their facial classification. He proposes to determine facies by cycles, and not cycles by facies, believing this method to be less difficult and more accurate. The author draws attention to the fact that not separate facies are determined by the Ivanov method, but groups of facies which are in contact with marked facies. The facial-cyclical method was successfully applied in the Kuznetsk and many other coal basins. Summarizing it may be stated that the facial geotectonic analysis of G.A. Ivanov has many similarities with the facial-cyclical method, in contrast to the facial analysis which disregards the rules of periodicity. In the lectures of T.A. Ishina, V.V. Koperina and others it is stated that facial

analysis represents the study of primary or genetic properties of rocks originating during the process of sedimentation and subsequent diagenetic transformation. Based on the total of these indications, conclusions are drawn pertaining to the conditions under which sedimentation took place and the facial composition of the coal-bearing strata is established. The author disagrees with this view, in as much as it does not consider the importance of sequence or alternation of rocks for the formation of facies, their paragenetic composition. Summarizing it may be stated that lithologists, using facial analysis of the improved stage, i.e. as a facial-cyclical method, will obtain better results and will further improve the method itself. Lithology of coal-bearing strata requires further studies and exchanges of experiences on the matter. At the present time there are no differences existing between the methods of approach which cannot be overcome as long as they are not throttled by denying the geotectonic factor of alternation of rocks or by disregarding the importance of studying the individual lithologic characteristics of rocks or by ignoring the importance of establishing the

Similarities and Differences of Features Between Facies, Facies-Cyclic and Facies-Geotectonic Methods of Studying Coal Bearing Strata 11-1-1/29

different facies by all available methods.
There are 18 Russian references.

AVAILABLE: Library of Congress

Card 4/4

KOPERINA, V.V

AUTHOR: Koperina, V.V.

TITLE: Facies and Types of Accumulation of Coal in Coal-Bearing Deposits of the Donbass (Fatsii i tipy uglenakopleniya v uglenosnykh otlozheniyakh Donbassa) 11-1-2/29

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, 1958, # 1, pp 12-25 (USSR)

ABSTRACT: The article is a review of the facial composition of coal-bearing strata of the Donbass. It is shown that the alternation of facies may not be explained by fluctuations of movements, but by changing the relation existing between the speed of submersion and accumulation of deposits. Two types of accumulation of coal have been established at the Donbass: accumulation of coal on shallow coastal areas, and accumulation of coal at deltas with shifting river mouths. Facial analysis clarified the question of tectonic movements during the period of accumulation and supported the assumption that changes of facies were effected solely by the submersion of the Donbass area, and not by fluctuating movements. The present studies are based on research conducted by several geologists in 1948, and on core drilling operations carried out by the author in 1955 of the C_1 to C_5

Card 1/4

Facies and Types of Accumulation of Coal-Bearing Deposits of the Donbass 11-1-2/

layers of the Lower Carboniferous strata. The author distinguishes between 4 alternating types of rocks pertaining to the facies formed at: 1. Interspersion and ledges. 2. Lagoons and bays. 3. Shallow coastal waters. 4. Swamps. The author refers to various factors affecting the formation of deposits under different tectonic conditions. The type of coal deposits observed at the Lower Carboniferous period of the Donbass may be classified as a coal formation of a shielded shallow coastal area, for which type the following symptoms are characteristic: 1. The facial composition of the coal-bearing strata is uniform. 2. Underlying swampy facies are covered by facies of shallow waters and lagoons. 3. Scattered limestone formations of limited dimensions with characteristics of deposits of zones of shallow sea waters. 4. Considerable thickness of coal-bearing strata and high content of coal. 5. Rhythm in the structure of the coal-bearing strata is clearly discernable, i.e. frequent recurring successions of genetic facies. 6. Coal deposits are relatively thin and are wide spread. 7. The mineral content of the coal is low. 8. The coal layers contain considerable quantities of cutinized and fusainized components. Citing

Card 2/4

Facies and Types of Accumulation of Coal-Bearing Deposits of the Donbass

the studies of Z.V. Timofeyeva, Yu.A. Zhemchuzhnikov, I.V. Samoylov and D.V. Nalivkin, the author gives a detailed lithologic-facial description of the various Carboniferous layers as to their thickness, location, genetics, etc. A.Z. Shirokov gives a comprehensive account on the correlation of coal-bearing properties and the occurrence of sandstone formations of C_2^6 layers, where, as in C_2^7, the coal contents are associated with delta facies and the coal contents decrease with diminishing delta sediments to a greater degree than at the C_2^5 and C_2^6 layers. Accumulation of coal found in C_2^5, C_2^6, and C_2^7 layers have characteristic properties and may be called typical examples of coal formations in delta areas with shifting river mouths. The following are the basic features of this type: 1. Delta facies are widely found in coal-bearing strata, which consist chiefly of thick layers of sandstone. 2. Frequently, the composition of the facies is manifold: besides delta facies, sea-coastal, lagoon, lake, swamp and other facies are found in coal-bearing strata. 3. Coal layers are deposited on clay formations. 4. The rhythm of the structure of the coal-bearing strata is clearly recognizable. 5. The coal-bearing strata is very thick and

Facies and Types of Accumulation of Coal-Bearing Deposits of the Donbass

contains numerous coal seams. 6. Coal seams are generally thin when spread over a large area. 7. Coal deposits have relative low ash contents. A review of facial composition of rocks forming coal-bearing strata of the Donbass revealed two types of accumulation of coal, which are characterized by the probability of high concentrations, and which are associated with certain facial conditions, namely: 1. Accumulation of coal in flat coastal areas of the sea, protected by ledges; 2. Accumulation of coal on delta areas with shifting river mouths.
There are 20 Russian references.

ASSOCIATION: Laboratory of Coal Geology of the USSR Academy of Sciences, Leningrad (Laboratoriya geologii uglya AN SSSR, Leningrad)

SUBMITTED: January 16, 1957.

AVAILABLE: Library of Congress

RADCHENKO, O.A.; KOPERINA, V.V.

Use of thermal analysis in studying dispersed organic matter in rocks. Dokl. AN SSSR 135 no.3:713-716 N '60. (MIRA 13:12)

1. Laboratoriya geologii uglya Akademii nauk SSSR. Predstavleno akad. N.M. Strakhovym.
(Rocks—Thermal properties) (Organic matter)

KOPEIRINA, V.V.

Facies of dry plains in the Kuznetsk series of the Kuznetsk Basin. Dokl. AN SSSR 135 no.4:951-953 '60. (MIRA 13:11)

1. Laboratoriya geologii uglya Akademii nauk SSSR. Predstavleno akademikom D.V.Nalivkinym.
(Kuznetsk Basin--Rocks, Sedimentary)

KOPERINA, V.V.; DVORETSKAYA, O.A.

Density and porosity of clay rocks. Trudy GIN no.115:115-123 '65. (MIRA 18:12)

MIL'MAN, N.Ya. kand.med.nauk, KOPERKO, F.F.

A case of calcified echinococcus. Vest.rent. i rad. 33 no.4:78-79 Jl-Ag '58 (MIRA 11:8)

1. Iz rentgenotsentra (zav. L.Ye. Kishinevskiy) Respublikanskoy klinicheskoy bol'nitsy (glavnyy vrach N.A. Testemitsanu), Kishinev.
(KIDNEY DISEASES, case reports
calcified echinococcosis (Rus))
(ECHINOCOCCOSIS, case reports
calcified, of kidneys (Rus))

S/058/62/000/006/033/136
A061/A101

AUTHORS: Turyanitsa, I. D., Chepur, D. V., Koperles, B. M.

TITLE: A photoelectric study of absorption, reflection, and dispersion of mercurous iodide specimens

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 33, abstract 6V220 ("Dokl. i soobshch. Uzhgorodsk. un-t. Ser. Fiz.-matem. n.", 1961, no. 4, 60)

TEXT: The curves of absorption, reflection, and dispersion of mercurous iodide single crystals and polycrystalline films were measured at room temperature. The principal absorption maximum was situated in the ultraviolet, and the additional one (580 mμ) was due to stoichiometric iodine excess. The reflection factor was ≈10% and >20% in the red and violet spectrum regions, respectively.

[Abstracter's note: Complete translation]

Card 1/1

KOPERNICKY, A.; [redacted]

TECHNOLOGY

periodicals: PRUMYSL POTRAVIN Vol. 9, no. 10. Oct. 1956

NAVRATIL, J.; STANEK, V.; KOPERNICKY, A. Danish poultry farming. (Supplement). p. 1.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 5
May 1959, Unclass.

KOPERNIKOV, V., pensioner

Restoring ancient oaks. Zhil.-kom.khoz. 11 no.6:31 Je '61.
(MIRA 14:7)
(Moscow—Oak)

KOPERNIKOV, V.V., inzh.

Subway tracks. Put' i put. khoz. no.2:37-38 F '58. (MIRA 11:3)
(Moscow--Subways) (Electric railroads--Rails)

DVOSKIN, S.M., inzh.; KOPERNIKOVA, V.N., inzh.

Cast iron structure in centrifugally cast pipe. Lit. proizv. no.11:38-39 N '65. (MIRA 18:12)

KOPERNIKOVA, V.N.

Determining the quantity of graphite in centrifugal by cast products. Lit. proizv. 5:40-41 My '64. (MIRA 18:3)

KOPERSAK, G.D.

GASTEVA, S.O.; KREL'SHTEYN, B.I.; LYAPIN, S.Ye.; SHIDLOVS'KA, M.M.; KOPERSAK, G.D., redaktor; MONZHERAN V.F., tekhnichniy redaktor

[Methods of teaching mathematics; a manual for teachers and students in pedagogical schools] Metodyka vykladannia matematyky; posibnyk dlia vchyteliv i studentiv pedagogichnykh instytutiv. Za zahal'noiu red. S.IE.Liapina. Pereklad z druhoho, vypravlenoho rosiis'koho vydannia Uchpedhizu, zatverdzhenoho Ministerstvom osvity RRFSR. Kyiv, Derzh. uchbovo-pedagog. vyd-vo "Radians'ka shkola," 1956. 467 p. (MIRA 10:2)

(Mathematics--Study and teaching)

KOPERSAK, G.D.

LOPOVOK, Lev Mikhaylovich; KOPERSAK, G.D., redaktor; MONZHERAN, V.F., tekhnicheskiy redaktor

[Practices in teaching mathematics in secondary schools] Z dosvidu vykladannia matematyky v serednii shkoli. Kyiv, Derzh. uchbovo-pedagog. vyd-vo "Radians'ka shkola," 1957. 202 p. (MLRA 10:5)

(Mathematics--Study and teaching)

KOSTARCHUK, Viktor Nikolayevich[Kostarchuk, V.M.]; KHATSET, Boris Isaakovich; KOPERSAK, G.D.[Kopersak, H.D.], red.; VOLKOVA, N.K., tekhn. red.

[What is possible and what is not possible in geometry using compass and ruler]Pro mozhlyve i nemozhlyve v geometrii tsyrkulia i liniiky. Kyiv, Radians'ka shkola, 1962. 124 p. (MIRA 16:1)

(Geometry)